VZCZCXRO4845 RR RUEHBI RUEHCI RUEHLH RUEHNEH DE RUEHKT #0484/01 1610149 ZNR UUUUU ZZH R 100149Z JUN 09 FM AMEMBASSY KATHMANDU TO RUEHC/SECSTATE WASHDC 0287 INFO RUEAEPA/EPA WASHDC 0050 RUEHRC/USDA WASHDC RUEHLM/AMEMBASSY COLOMBO 7305 RUEHKA/AMEMBASSY DHAKA 2629 RUEHIL/AMEMBASSY ISLAMABAD 5351 RUEHNE/AMEMBASSY NEW DELHI 3065 RUEHBJ/AMEMBASSY BEIJING 6984 RUEHCG/AMCONSUL CHENNAI 3045 RUEHCI/AMCONSUL KOLKATA 4622 RUEHLH/AMCONSUL LAHORE 0316 RUEHNEH/AMCONSUL HYDERABAD 0021 RUEHBI/AMCONSUL MUMBAI 4006

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DEPT FOR OES/PCI, OES/ENRC, SCA/INS, SCA/RA USAID FOR ANE/SAA EPA FOR OIA FREEMAN USDA FOR ARS, FS, AND APHIS STATE PASS TO NSF

SIPDIS

E.O. 12958: N/A TAGS: <u>SENV</u> <u>TBIO</u> <u>XD</u> <u>NP</u>

SUBJECT: THE WORLD'S WETTEST PLACE

SUMMARY

11. On location at the world's wettest place in Cherrapunjee, in the Indian state of Meghalaya, the South Asia Regional Environment Officer (REO) found a modest trend towards more erratic rainfall patterns since the 1960s. Over the past winter the area went without rain for five months and with little capacity to store water, Meghalaya plateau actually experienced a water shortage. The hills of Meghalaya have become prime date collection points in the study of climate change.

12,000 MILLIMETERS OF RAIN

- 12. The Meghalaya plateau provides a unique platform to study changing atmospheric conditions and climate. It rises to 1900 meters above sea level in northeastern India. During the monsoon, clouds heavily laden with moisture from the Bay of Bengal batter into the plateau's steep southern escarpment sending rainwater cascading down to the flood plains of northeastern Bangladesh. At the plateau's edge, the village of Cherrapunjee reports the world's highest average annual rainfall of 12,000 millimeters (mm).
- ¶3. Rainfall has been measured at Cherrapunjee since 1903 and has shown considerable variation. The lowest annual rainfall of 6,283 mm was recorded in 1951; the highest of 23,663 mm (or about 80 feet of rain) was recorded in 1974. Since the mid-1960s, the pattern of rainfall has been 10 to 15 percent more erratic than pre-1960 levels, a finding that specialists are linking with climate change.

NORTH EASTERN HILL UNIVERSITY

14. The area's extraordinary precipitation makes it an invaluable place to study climate change. The North Eastern Hill University, based nearby in the Meghalaya capital of Shillong, is engaged in a new program to understand how climate change is affecting monsoon patterns in South Asia. The University has set up a series of automatic weather monitoring stations and rainfall recording instruments that provide hourly readings throughout the year. During a May 20-21 visit to Meghalaya, REO was offered a vast compendium of three years of raw water data that is available to

climate researchers.

- 15. The North Eastern Hill University professors reported that for the first time since rainfall records had been kept, the Cherrapunjee hills had received no rain from mid-November to mid-March. As a consequence of the winter water shortage and heavy May rains, the area's temperate crops including peaches, pears and plums, were spoiled. Meghalaya's Department of Agriculture is concerned that climate change is affecting agricultural patterns, but has not established a climate cell to research adaptation practices on a scientific basis.
- 16. Building on its location and growing expertise on climate issues, the North Eastern Hill University is organizing a number of environmental conferences. These include a series of workshops in September and October to identify how climate change will affect payments for environmental services. The workshops will be organized in partnership with Oxford and Liverpool Universities. In November, the University will host a conference, supported by the United Nations University, on food production in mountain areas.

WASHING POLLUTION DOWNSTREAM

17. Cherrapunjee's thin topsoil contributes to the rapid runoff that inundates the Bangladesh plain. With little capacity on the plateau to store water, rainwater is washed downstream carrying local pollutants to Bangladesh. Erosion exacerbated by slash and burn agricultural practices, still in use by tribal people, takes away much needed soil, and unregulated strip mining of coal and limestone has rendered many rivers unsafe for human consumption. Because

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tribal people have extensive rights over land including mineral rights in Meghalaya, the state has little say in how the forests are managed. Only 6 percent of the state's forested lands falls under the jurisdiction of the State Forest Department.

COMMENT

- 18. Changes in rainfall patterns in the world's wettest place can potentially contribute to our understanding of how climate change is affecting the South Asian monsoon. The importance of this research is clear when we are reminded that the livelihoods of 500 million people in the Gangetic plain depend on the annual monsoon.
- 19. This cable has been cleared by Consulate General Kolkata.

POWELL